J. G. Stowe.

Tool Rest for Lathes.

No. 97,723. Patented Dec. 7, 1869.

Fig. 1.

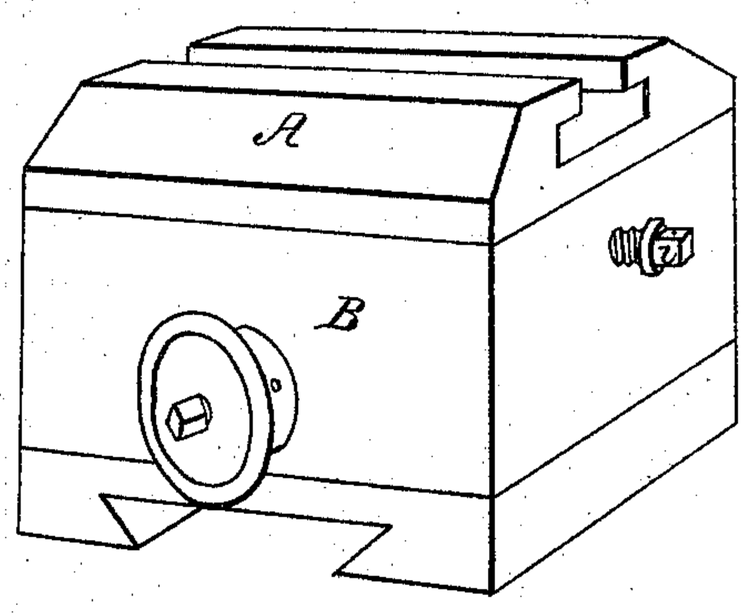


Fig. 2.

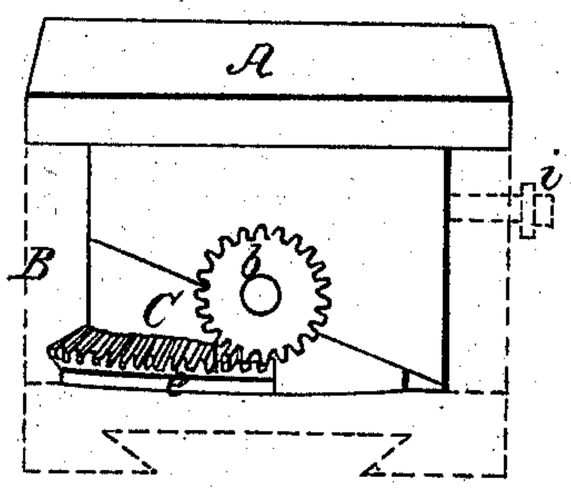


Fig. 3.

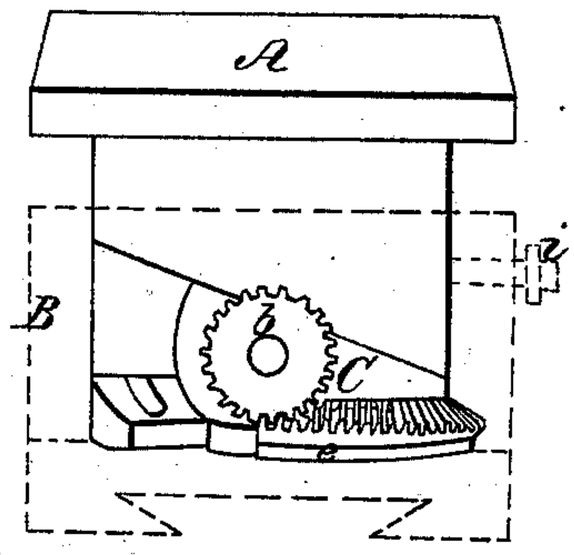


Fig. 4.

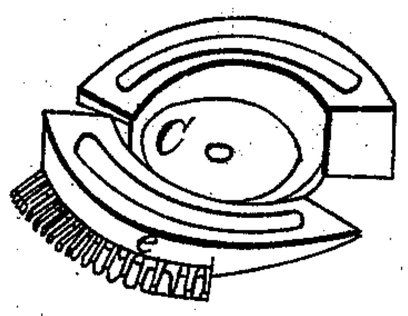
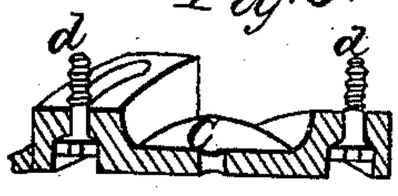


Fig. 5.



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JAMES G. STOWE, OF PROVIDENCE, RHODE ISLAND.

Letters Patent No. 97,723, *dated December* 7, 1869.

IMPROVED TOOL-REST FOR LATHES.

The Schedule referred to in these Letters Patent and making part of the same.

I, JAMES G. STOWE, of the city and county of Providence, and State of Rhode Island, have invented an Improvement in Lathes, of which the following is a specification.

To enable those skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

Figure 1, of the accompanying drawings, represents an exterior perspective view of my invention, A being the poppet-block, B the tool-rest, and I, a set screw.

Figure 2 shows the construction and adjustment of the helical cam-block C, cog-wheel *b*, and cog-rack, *e*, in their relative positions, when the poppet-block A is at the lowest point of depression.

Figure 3 shows the relative positions of the same when the poppet-block A is at the highest point of elevation.

Figure 4 is a perspective view of the helical cam-block C, exhibiting the two cam-surfaces, the cog-rack *e*, and the slots through which the screws *d d*, of fig. 5, pass in screwing the cams to the poppet-block.

Figure 5 is a sectional view of the helical cam-block, showing its slots and the positions and working of the depressing screws *d d* therewith.

When the poppet-block A is at its lowest point of depression, by turning the cog-wheel *b*, its teeth are engaged in the cog-rack *e*, and revolve the cam-block C, which raises the poppet-block A.

When the poppet-block A is at any point above the lowest point of depression, by the reverse movement of the cog-wheel *b*, the cam-block C is revolved backward, and the heads of the screws *d d* traversing the widened or countersunk portions of the slots in the cams, draw the poppet-block downward.

It will readily be seen that a single cam or a series of cams operated by gear and rack, or their equivalents, can be substituted for and made to answer the purposes of the cams above described.

I claim, as my invention—

The combination of the poppet-block A, tool-rest B, helical cam-block C, screws *d d*, cog-wheel *b*, and cog-rack *e*, or their equivalents, constructed and arranged substantially as and for the purpose described.

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